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Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

— of inventorship (Rule 4.17(iv)) for US only

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: TUMOR TARGETING AGENTS AND USES THEREOF

(57) Abstract: This invention relates to novel tumor targeting motifs, units and agents, as well as tumor targeting peptides and analogues thereof. The targeting agents typically comprise at least one targeting motif; Aa-Bb-Cc, and at least one effector unit. The invention further relates to specific tumor targeting peptides, pharmaceutical and diagnostic compositions comprising such peptides. Disclosed are also methods for diagnosing or treating cancer.

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 03/00723

A. CLASSIFICATION OF SUBJECT MATTER

IPC7: C07K 7/06, A61K 38/08, A61P 35/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC7: C07K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

CHEM.ABS.DATA, WPI DATA

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5981478 A (RUOSLAHTI ET AL), 9 November 1999 (09.11.99), see seq. 20 --	1-2,7,9
X	US 5622699 A (RUOSLAHTI ET AL), 22 April 1997 (22.04.97), see table 1 and column 13 --	1-26
X	WO 0244215 A2 (COCKBAIN, JULIAN), 6 June 2002 (06.06.02), see claim 10 and page 35, lines 2-15 -----	1-26

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance: the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance: the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search

17 December 2003

Date of mailing of the international search report

30-12-2003

Name and mailing address of the ISA/

Swedish Patent Office

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/FI03/00723

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.: 24-26
because they relate to subject matter not required to be searched by this Authority, namely:
see next sheet
2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/FI03/00723

Claims 24-26 relate to methods of treatment of the human or animal body by surgery or by therapy/diagnostic methods practised on the human or animal body/Rule. 39.1.(iv)). Nevertheless, a search has been executed for these claims. The search has been based on the alleged effects of the compounds/compositions.

INTERNATIONAL SEARCH REPORT

Information on patent family members

31/10/03

International application No.

PCT/FI 03/00723

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
US 5981478 A	09/11/99	AU 682561 B AU 1259695 A DE 69427370 D,T EP 0730607 A,B EP 0906919 A JP 9509142 T US 2002103130 A WO 9514714 A US 5627263 A	09/10/97 13/06/95 18/04/02 11/09/96 07/04/99 16/09/97 01/08/02 01/06/95 06/05/97
US 5622699 A	22/04/97	AT 195181 T AU 693723 B AU 6374098 A AU 6973996 A CA 2204535 A,C DE 773441 T DE 69609585 D,T EP 0773441 A,B EP 0876611 A EP 0987275 A JP 10502674 T JP 2003155296 A US 6068829 A US 6296832 B US 6306365 B WO 9710507 A	15/08/00 02/07/98 18/06/98 01/04/97 20/03/97 04/03/99 05/04/01 14/05/97 11/11/98 22/03/00 10/03/98 27/05/03 30/05/00 02/10/01 23/10/01 20/03/97
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